

REMARKS

Applicants have reviewed the Office Action dated April 29, 2010, and the references cited therein. Claims 1-20 are presently pending. Claims 1-20 presently stand rejected as obvious over the prior art.

Applicants have amended each of the independent claims. The amendments are intended to make clear both the physical arrangement of the recited components of the claimed invention and the content of the information provided by the information sources (i.e., plant information rendered by process control equipment). Applicants' previous amendments (accompanying their request for continued examination) sought to incorporate the guidance provided by the previous Board Decision that noted the potential merit of Applicant's argument regarding the inapplicability of the cited prior art to a system that provides access to industrial process control information. See, Board Decision, page 9, lines 4-14. The Burd reference neither addresses the physical limitations of the claimed data access subsystem nor the specifically identified sources of information. Thus, the Office Action does not present a *prima facie* case of obviousness *at least* with regard to the presently pending claims.

Applicants submit that the presently pending claims are patentable over the prior art. In particular, the combined teachings of the cited references neither disclose nor suggest, to one skilled in the art at the time of the invention, the claimed invention which incorporates particular functionality of an extensible portal server system for providing user access to information arising from the operation of industrial plant process control equipment.

Applicants request favorable reconsideration of the previous rejection in view of Applicants' amendments and remarks.

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Summary of the Rejections

1. Claims 1-3, 5, 6 and 8-20 are rejected under 35 U.S.C. 103(a) as being obvious over Khan et al. U.S. App. Serial No. 09/905,678 (Khan) in view of Wewalaarachchi et al. U.S. Pat. No. 6,571,140 (Wewalaarachchi) and Burd et al., US Pat. No. 6,990,653 (Burd).

2. Claims 4 and 7 are rejected under 35 U.S.C. 103(a) as being obvious over Khan in view of Wewalaarachchi, Burd and Polizzi et al. U.S. App. Serial No. 09/844,715 (Polizzi).

Applicants traverse the grounds for each and every rejection of the previously pending claims for at least the reasons set forth herein below.

Applicants' Remarks Concerning the Specific Grounds for the Rejections

1. Rejection of 1-3, 5, 6 and 8-20 over Khan in view of Wewalaarachchi and Burd

Applicants traverse the rejection of claims 1-3, 5, 6 and 8-20 as obvious over Khan in view of Wewalaarachchi and Burd. In particular Applicants traverse the rejection of the presently pending claims since a *prima facie* case of obviousness has not been established with respect to each of the presently pending independent claims which are directed to a system and method for providing user access to information, originating from industrial plant process control equipment, via an extensible portal server.

In response to Applicants' previous amendments (accompanying a request for continued examination), the Office Action cites Burd as disclosing a data access subsystem interposed between a portal server interface and information sources. However, the alleged data access subsystem (handlers 120?) cannot read on the claimed data access subsystem since Burd's handlers 120: (1) do not provide access to plant information originating from process control equipment, and (2) are not interposed via network links between the portal server and the process control equipment.

Applicants' Claimed Invention

Applicants' presently pending claims are directed to a customer-configurable, extensible plant process observation portal server system including a specifically recited source of plant information (process control equipment) and a physical network arrangement for providing the plant information to the plant process observation portal server (via a networked data access subsystem). The claimed portal server system is extensible by a customer in a number of respects, including adding new: plant information data sources/providers (servers) that are accessed via the portal server, plant information data handlers that process new data types, and new display elements for viewing plant information data provided by plant *process control equipment*. The disclosed and claimed customer-configurable plant process observation portal server system addresses challenges uniquely presented to providing a portal server that facilitates access by browser clients to a variety of plant data sources (*including specifically process control equipment*) that are not generally accessible to the public (via the Internet) and plant information that is not formatted for access via the Internet.

Applicants' claims are also directed to an extensible set of "data handlers" that are incorporated into the plant process observation portal. The data handlers (see, Data Handlers 130 in Fig. 2) process received data of differing types within the portal server prior to forwarding the data to client browsers.

Non-Obviousness of the Independent Claims

Applicants traverse the rejection of currently pending independent **claims 1 and 8-11** since the combined teachings of Khan, Wewalaarachchi and Burd do not disclose each recited element of these claims, and thus a *prima facie* case of obviousness has not been established with regard to currently amended independent claims 1 and 8-11. Furthermore, one skilled in the art would not be directed to the presently claimed invention by the combined teachings of Khan, Burd and Wewalaarachchi.

The current rejection does not present a *prima facie* case of obviousness since it does not show: (1) all the recited elements of any of the independent claims, OR (2) a reasonable

expectation of success by one skilled in the art at the time of the invention to modify Khan's user-configurable portal sites in view of Burd and Wewalaarachchi in a way that would render the presently claimed invention that includes a portal server providing access to information originating from process control equipment.

(1) The Absence of Teaching of the Claimed Data Access Subsystem (interposed via network links between process control equipment and the portal server)

Applicants have amended each of the presently pending independent claims to clarify the physical arrangement of the data access subsystem as well as the content of information provided by the data access subsystem. In particular, Applicants' claims each recite that the data access subsystem is interposed, via network links, between the portal server data interface and the extensible set of plant information sources (specifically including "process control equipment"). See, Applicants' FIG. 1, data access server 30.

In response to the previous claim amendments (accompanying the RCE) adding the recited "data access subsystem," the Office Action references the teachings of Burd. However, Burd (see, e.g., FIG. 1) merely discloses (software) handlers 120 in FIG. 1 that are NOT:

- (1) physically interposed via network links between a portal server and a set of plant information sources; and
- (2) plant information sources that include process control equipment.

In view of the absence of any teaching in Burd of either of the above-cited elements (incorporated into each of the presently pending independent claims), Applicants submit that the presently pending independent claims are not rendered obvious by the combined teachings of Kahn, Wewalaarachchi, and Burd.

(2) The Absence of Motivation to Provide Extensible Portal Access to Data Originating from Process Control Equipment

The Office Action asserts that Khan, at paragraphs 0077-79, discloses a user-configurable information portal site. The Office Action admits that Khan, having nothing whatsoever to do with plant process information portals, does not disclose or suggest Applicants' claimed

customer-configurable *plant process* observation portal server that provides access to an extensible set of plant information sources. The Office Action nonetheless concludes that the claimed invention is obvious (in part) because, as shown in Wewalaarachchi, plant process control systems were known at the time of the invention, and such system would "provide diverse way to control a real time system." See, Office Action, page 3.

Providing a portal server system for accessing a variety of proprietary/non-standard data sources/types presents unique security/safety challenges that are not present in the user-configurable portal sites described in Khan. Applicants' application explains in the Background (see, page 3, line 25, to page 4, line 7) that accessing process control systems and associated plant/process information presents unique issues/hurdles that are not present in typical publicly accessed portals (e.g., Yahoo.com). Such issues include: connecting the servers to data sources, handling a wide variety of information types, and the unique nature of virtually each plant control system data source set served by each installed portal server. As a result, developing/maintaining a portal server in a plant process environment is not even remotely comparable to supporting user-defined portal sites containing links to already Internet-accessible Web sites/pages (disclosed in the Khan reference). These differences between Khan's disclosed system and Applicants' claimed invention are addressed, for example, by the interfaces, toolkits, and databases described by Applicants in the written description and drawings of the present application. Therefore, the existence of plant processes and process control systems (as disclosed in Wewalaarachchi) does not, by itself, provide proper motivation to modify Khan's disclosed system to render the claimed customer-configurable plant process observation portal server (supporting the designation of new plant information sources).

The Board, on appeal, appeared to concede the existence of substantial differences between Khan's system and one that is suitable for providing access to non-public, highly sensitive plant process information that is provided in a variety of forms by a variety of plant information sources. See, Board Decision, page 9, lines 4-14. Because the user-defined personal portal sites described in paragraphs 0077-79 of Khan provide access to already Internet-accessible web sites/pages (e.g., on-line newspapers and other public content providers), Khan describes a relatively simple information portal site configuration task that involves a user

designating the already Internet-accessible Web pages/links for a list of pages that are incorporated into the user's personalized portal site. However, Kahn's methodology for adding new publicly available web pages is wholly inapplicable to a plant/process control environment (as explained by Applicants in the Background of the present application) wherein information from *process control equipment* is not already Internet-accessible via publicly accessible links.

As explained by Applicants' in their presently pending application, the plant process information is received from a non-public data source (the claimed data access subsystem) and converted by an appropriate handler on the portal server into an appropriate form/format that is thereafter provided by the plant portal server to a browser client. The Internet-accessible page/site content environment within which the disclosed Kahn system operates is incomparable to a plant process environment disclosed/claimed in the present application. Therefore, the claimed plant process portal server system, including a configuration utility supporting extending the set of plant information sources (including process control equipment) providing information to a data access subsystem (physically interposed via network links between the plant information sources and the portal server), is not suggested by the combined teachings of Kahn, Burd, and Wewalaarachchi.

Responding to the Board Decision's comment that the claimed invention did not include sufficient distinguishing structure (i.e., define a system connected to process control equipment data sources), Applicants added the presently recited data access subsystem and process control equipment data sources. In view of the substantial differences between the general Internet page/site aggregation portal site disclosed in Khan and Applicants' disclosed/claimed plant process observation portal server, the Office Action's obviousness rejection of each of the independent claims, based upon the desirability of having diverse ways to control a real time system, is improper.

Applicants traverse the rejections of each of the presently pending **dependent claims 2, 3, 5, 6, and 12-16** for at least the reasons set forth herein above regarding independent claims 1 and 8 from which these claims depend. Specific ones of the rejected dependent claims (and independent claim 8) and are addressed herein below.

Claims 5 and 8

Claims 5 and 8 recite a further capability of the portal configuration utility that facilitates extending the set of *data handlers* within the portal server. Each data handler (see, extensible set of Data Handlers 130 in Fig. 2) processes a particular type of plant process information provided by a source of plant information. Applicants submit that neither Khan nor Wewalaarachchi discloses a set of data handlers for handling plant information of different types as disclosed and claimed. The Office Action cites column 7, lines 41-54 of Wewalaarachchi as disclosing this additional element. However, the cited text from Wewalaarachchi merely discloses adding a new "data source" which is unequivocally distinguished by Applicants in their claims and written description (compare Fig. 4's adding a data source providing data processed by an existing data handler and Figs. 14/15 for adding a new data handler for a new type of information). Applicants' specification discloses an enhanced embodiment including an associated configuration interface (Figs. 14/15) wherein a customer-configurable plant process observation portal server supports designating a new handler for processing received information in a new way (e.g., different protocol/format).

Claims 12-15 and 17-20

Applicants furthermore traverse the rejection of claims 12-15 and 17-20. The recited data handlers are incorporated within the portal server. The presence of such data handlers within the portal server makes clear the fundamental differences between Applicants' disclosed/claimed invention and the system disclosed in the Khan application which merely enables users to designate links to sources of interest but does not describe any intermediate "handlers" for processing data received from the linked sources. Khan's portal server does not include/require any type of specialized data handlers to handle information of a particular type. The portion of Wewalaarachchi referenced by the Office Action does not appear to have any disclosure whatsoever to suggest modifying Khan's portal server to include multiple data handlers of the specified types. For at least this reason the obviousness rejections of each of the claims reciting a "data handler" should be reversed.

2. Rejection of claims 4 and 7 over Khan in view of Wewalaarachchi, Burd and Polizzi

Applicants seek reversal of the rejection of claim 4 for at least the reasons set forth herein above with regard to claim 1 from which claim 4 depends.

Applicants seek reversal of the rejection of claim 7 for at least the reasons set forth herein above with regard to claim 1.

Conclusion

If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney.

Respectfully submitted,



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